

### **ABSTRACT**

A heave compensation apparatus and method for a winch or crane system, the winch or crane system preferably for a vessel and including a lift wire for attachment to a load. The apparatus includes a vessel motion measurement device which may be in the form of a motion reference unit for measuring the motion of the vessel, and a control device or computer capable of receiving an output from the vessel motion measurement device and controlling the winch or crane system according to the movement of the vessel, so as to stabilise the load. The apparatus may further optionally include one or more of a lift wire tension measuring device for measuring the tension in the lift wire; a lift wire distance measurement device which measures the length of lift wire that has been paid out; and a load motion measurement device for measuring the motion of the load.